WHAT IS CLAIMED IS:

1. A mask assembly comprising:

a patient interface configured for connection to a patient in use, the patient interface being in communication with a source of gas pressurized above atmospheric pressure; and

a filter assembly configured to receive gas exhaled by the patient in use, whereby the exhaled gas is vented to atmosphere following passage through said filter assembly.

- 2. The mask assembly of claim 1, further comprising a connection joint defining a passage between the patient interface and the vent assembly.
- 3. The mask assembly of claim 2, wherein the connection joint comprises a T-shaped joint in which case the T-shaped joint is provided in use between the filter assembly and the source of pressurized gas.
- 4. The mask assembly of claim 2, wherein the connection joint is an L-shaped joint in which the filter assembly is positioned in use between the source of pressurized gas and the L-shaped joint.
- 5. The mask assembly according to any one of claims 1-4, wherein the filter assembly includes an inlet to receive the gas exhausted by the patient, a central chamber,

a filter provided in the central chamber, and an outlet configured to release the exhausted gas following filtering.

- 6. The mask assembly of claim 5, wherein the filter is made of a hydrophobic material.
- 7. The mask assembly according to any one of claims 5-6, wherein the central chamber is provided with a calibration cap including one or more openings.
- 8. The mask assembly of claim 7, wherein the calibration cap includes a vent port in communication with the central chamber and a plug for said outlet.
- 9. The mask assembly according to any one of claims 1-8, wherein the filter assembly includes an in-line vent positioned in use between the source of pressurized gas and the patient interface.
- 10. The mask assembly according to any one of claims 1-4 or 9, wherein the filter assembly includes a filter.
- 11. The mask assembly according to any one of claims 5-8 or 10, wherein the filter has a viral efficiency of greater than 99.999%.

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12. The mask assembly according to any one of claims 5-8, 10 or 11, wherein the filter has an impedance of not greater than about 2.0 cm water at about 60 liters per minute.

- 13. The mask assembly of claim 1, wherein the filter assembly is positioned in use between the source of pressurized gas and the patient interface.
- 14. The mask assembly according to any one of claims 1-13, further comprising an anti-asphyxia valve.
- 15. The mask assembly of claim 14, further comprising a filter cap provided to the filter assembly, wherein the anti-asphyxia valve is provided to the filter cap.
- 16. The mask assembly according to any one of claims 14-15, further comprising a vent, wherein the anti-asphyxia valve is provided to the vent.